

WHAT IS CLAIMED IS:

1. A dryer for tumble drying articles comprising:

a drum comprising a cavity configured to hold articles to be dried;

a first motor drivingly coupled to said drum to rotate said drum;

a heat source in flow communication with said cavity; and

a variable speed motor drivingly coupled to a blower positioned to deliver heated air from said heat source to said cavity.
2. A dryer in accordance with Claim 1 further comprising a control operatively coupled to said variable speed motor to control at least one operating parameter of said variable speed motor in a fixed state.
3. A dryer in accordance with Claim 2 wherein said operating parameter is motor speed.
4. A dryer in accordance with Claim 2 wherein said operating parameter is motor torque.
5. A dryer in accordance with Claim 1 further comprising:

an outlet duct in flow communication with said cavity; and

a pressure sensor positioned to sense air pressure within said duct, said sensor configured to generate a signal representative of the sensed air pressure.
6. A dryer in accordance with Claim 5 further comprising a controller responsive to the signal from said pressure sensor operationally coupled to said pressure sensor.
7. A dryer in accordance with Claim 2 further comprising a temperature sensor positioned to sense an air temperature associated with said cavity, said sensor configured to generate a signal representative of the sensed air temperature.

8. A dryer in accordance with Claim 7 further comprising a controller responsive to the signal from said temperature sensor operationally coupled to said temperature sensor.

9. A dryer in accordance with Claim 7 further comprising an air inlet in flow communication with said cavity positioned between said cavity and said heat source, said temperature sensor positioned within said air inlet.

10. A dryer in accordance with Claim 7 further comprising an air outlet in flow communication with said cavity, said temperature sensor positioned within said air outlet.

11. A dryer in accordance with Claim 1 wherein said variable speed motor comprises a self governing motor.

12. A blower control system for a tumble type dryer having a variable speed blower motor driving the blower to supply heated air to the dryer cavity through a cavity inlet and exhaust air from the dryer cavity through a cavity outlet, said system comprising:

at least one temperature sensor positioned to sense a temperature associated with the dryer and configured to generate a temperature signal representative of the sensed temperature;

at least one pressure sensor positioned to sense a pressure associated with the dryer and configured to generate a pressure signal representative of the sensed pressure; and

a controller operatively coupled to said at least one temperature sensor and said at least one pressure sensor and configured to receive the temperature and pressure signals and control the operation of the variable speed blower motor based on at least one of the received signals.

13. A blower control system in accordance with Claim 12 wherein the temperature signal is representative of cavity inlet air temperature.

14. A blower control system in accordance with Claim 12 wherein the temperature signal is representative of cavity outlet air temperature.

15. A blower control system in accordance with Claim 12 wherein said controller regulates the operation of the variable speed blower motor based on the temperature signal to maintain a substantially constant inlet air temperature setpoint for the cavity.

16. A blower control system in accordance with Claim 12 wherein said controller is configured to receive a signal representative of clothes load and regulate the operation of the variable speed blower motor based on the clothes load signal.

17. A blower control in accordance with Claim 12 further comprising an inverter operatively coupled to the variable speed blower motor and configured to control an operating parameter of the variable speed blower motor.

18. A blower control in accordance with Claim 17 wherein said controller controls a duty cycle of said inverter.

19. A blower control in accordance with Claim 18 wherein said operating parameter is motor speed.

20. A blower control in accordance with Claim 18 wherein said operating parameter is motor torque.

21. A method for controlling a variable speed blower for a clothes dryer, said method comprising:

installing a controller on the dryer in communication with at least one temperature sensor and at least one pressure sensor;

receiving a signal in the controller from the at least one temperature and pressure sensors; and

controlling the blower motor based on at least one of the received temperature and pressure signals.

22. A method in accordance with Claim 21 wherein said controlling the blower motor further comprises controlling the blower motor based on a dryer load size.

23. A method in accordance with Claim 22 wherein said controlling the blower motor further comprises controlling the blower motor to maintain a substantially constant inlet air temperature setpoint for the dryer.

24. A method in accordance with Claim 22 wherein said controlling the blower motor comprises controlling a duty cycle of an inverter operationally coupled to the blower motor.